

REMARKS

Summary of Interview:

On behalf of Applicants, the undersigned would like to thank the Examiner for the courtesies extended in the multiple interviews recently conducted regarding this application. In those interviews, there was a discussion concerning the patentability of claim 1 over the Chou and Kim references in view of the above amendments. While the Examiner stated that he would have to further review the matter, he indicated that he thought that the above amendment would likely distinguish over the current art of record.

Disposition of Claims:

Claims 1-22, 24, 25, 27-31, 33, 34, and 37-40 are all the claims pending in the application. Of these claims, claims 1-22, 24, 25, 27-31, 33, 34, 39 and 40 are rejected and claims 37 and 38 are withdrawn from consideration. Claim 1 has been amended above.

Claim 1 Distinguishes Over Chou in view of Kim:

Claim 1 has been amended to make it clear that the mass of polymeric material is a solid and to recite that the when the dye and solid mass of polymeric material contact each other the mass is in an un-melted state. It is submitted that the prior art fails to each or suggest the method as now recited in claim 1.

The Examiner cites to Kim for teaching the step of heating a surface region of a die as part of a molding process. However, as discussed during the interview, Kim clearly states that the plastic is in a molten state when the die contacts it, in contradistinction to the invention as now claimed.

In describing the conventional molding process Kim states:

Current molding processes of glass reinforced thermoplastic composite sheets begins with heating the composite blanks in an oven, typically in infrared or hot air convection ovens. The material is heated above its melting point or if an amorphous material at least substantially above its glass transition temperature. The hot blanks are then pressed between cool mold surfaces....

Col. 1, lines 30-36.

Kim further states that

It is an object of the present invention to provide a multilayer composite which can be used in the current molding systems without major modifications.

Col. 2, lines 12-14

Therefore, in both the Chou and Kim's patent the polymer is already melted before contacting the mold.

As the Examiner points out, Kim does disclose the possibility of heating the die. However, it does so to slow down the process of cooling the polymer, which is in a melted state, by heating the skin layer at a higher temperature with respect to the mold metal core.

As discussed in the specification is some detail, the present process results in heating and cooling times that are dramatically shorter than that disclosed in the prior art.

Based on the foregoing, it is respectfully submitted that the claims patentably distinguish over the cited art.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

/Brian W. Hannon/
Brian W. Hannon
Registration No. 32,778

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: February 25, 2011